

Mr. Terry Smith
Tenneco Packaging AVI
1411 Pidco Drive
Plymouth, Indiana 46563

Re: 099-11161-00028
Significant Source Modification to:
Part 70 permit No.: T099-5969-00028

Dear Mr. Smith:

Tenneco Packaging AVI was issued Part 70 operating permit T099-5969-00028 on June 28, 1999 for foam packaging materials. An application relating to the relaxation of the existing blowing agent usage limitation, due to improved emission factors developed from retention tests was received on July 19, 1999.

The modification is made pursuant to 326 IAC 2-7-12(d). The Part 70 permit is revised as follows (changes are bolded and deletions are strike through for emphasis):

- (1) Condition D.1.1 on Page 29 of 37 of the issued Part 70 permit shall be revised as follows:

D.1.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The input of blowing agent for the entire source shall be limited to ~~1429.8~~ **3,500** tons per twelve (12) month period, rolled on a monthly basis. This ~~production~~ **input** limitation ~~is~~ shall result in equivalent to VOC emissions of 249 tons per year, rolled on a monthly basis. The VOC potential to emit (PTE) for the entire source shall not exceed 249 tons per year. Therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21, will not apply.
- (b) During the first twelve (12) months of operation, the input of VOC raw material usage shall be limited such that the total usage divided by the accumulated months of operation shall not exceed ~~149.15~~ **291.6** tons per month.

- (2) Condition D.1.6 on page 31 of 37 of the issued Part 70 permit shall be revised as follows:

D.1.6 Testing Requirements [326 IAC 2-7-6(1)]

- (a) Testing of this facility is specifically required by this permit. Compliance with the control efficiency and minimum operating temperature specified in Condition D.1.9 shall be determined by a performance test conducted in accordance with Section C Performance Testing.

Retention data tests shall also be determined by a performance test conducted in accordance with Section C Performance Testing.

- (b) During the period within 60 days ~~after the issuance of this modification after achieving maximum production rate, but no later than 180 days after initial start-up~~, a performance test shall be required to demonstrate that the source is complying with 326 IAC ~~8-2-9~~ **8-1-6**.

- (1) If the oxidizer is determined to demonstrate compliance, the required temperature and control efficiency shall be specified.
 - (2) If the oxidizer is determined to not demonstrate compliance, the efficiency needed to comply with 326 IAC ~~8-2-9~~ **8-1-6** shall be determined by the performance test.
 - (3) The source shall be required to comply with the required control efficiency as determined by the performance test.
- (c) Retention data tests, **shall be ran on all grades being utilized by the source to determine the appropriate verify the emission factors for the** ~~various grade types, shall be ran on all grades being utilized by the source,~~ **used in establishing the blowing agent and VOC emission limits** . The source shall calculate the potential to emit (PTE) based on the worst case emission factors until the various emission factors for all other sheet grades have been verified and approved by OAM.
- (3) The Reporting Form on Page 36 of 37 is revised to reflect the new blowing agent input limit.

All other conditions in the Part 70 permit T099-5969-00028, issued on June 28, 1999 shall remain in effect.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, press 0 and ask for Aida de Guzman or extension 3-4972, or dial (317) 233-4972.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments
APD

cc: File -Marshall County
U.S. EPA, Region V
Marshall County Health Department
Northern Regional Office
Air Compliance Section Inspector - Paul Karkiewicz
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Part 70 Significant Source Modification

Source Background and Description

Source Name:	Tenneco Packaging AVI
Source Location:	1411 Pidco Drive, Plymouth, Indiana
County:	Marshall
SIC Code:	3086
Operation Permit No.:	T099-5969-00028
Operation Permit Issuance Date:	June 28, 1999
Significant Source Modification No.:	099-11161-00028
Permit Reviewer:	Aida De Guzman

The Office of Air Management (OAM) has reviewed a modification application from Tenneco Packaging AVI relating to the relaxation of the existing blowing agent usage limitation, due to improved emission factors developed from retention tests. This relaxation however, will not result in an increase in the existing VOC PTE of 249 tons per year.

History

On July 19, 1999, Tenneco Packaging AVI submitted an application to the OAM requesting a relaxation on the blowing agent input usage limit. Tenneco Packaging AVI was issued a Part 70 permit (T099-5969-00028) on June 28, 1999.

Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on July 19, 1999.

Emission Calculations

The source is requesting a modification to their Title V permit to relax the blowing agent input limit based on improved emission factors developed from retention tests. The IDEM, OAM, made it clear to the source that since, the tests done were not validated by IDEM, OAM, a compliance test will be required to verify the validity of these emission factors.

Summary of Composite Emission Factors Based on Blowing Agent Retention Tests and Collection Modifications

Table 1

FOAM SHEET LINES/PRODUCT GRADES	VOC EMISSIONS USING OLD EFs (TON/YR)	VOC EMISSIONS USING NEW EFs (TON/YR)
FOAM SHEET LINE 1		
Sheet Grade FS11	123.4	46.6
Sheet Grade FS14	99.1	26
Sheet Grade FS29	145.5	39.6
Sheet Grade FS31	134.8	46
Sheet Grade FS36	114.3	33.3
Sheet Grade FS84	64.0	18.6
Sheet Grade FS99	98.7	15.8
Total for Sheet Line 1	145.5	46.6
FOAM SHEET LINE 2		
Sheet Grade FS11	206.6	43.7
Sheet Grade FS14	165.2	24.3
Sheet Grade FS29	242.4	37.1
Sheet Grade FS31	224.7	43.4
Sheet Grade FS36	190.5	31.2
Sheet Grade FS84	106.8	17.4
Sheet Grade FS99	43.4	14.8
Total for Sheet Line 2	242.4	43.7

Table 2

FOAM PROFILE LINES/PRODUCT GRADES	VOC EMISSIONS USING OLD EFs (TON/YR)	VOC EMISSIONS USING NEW EFs (TON/YR)
PROFILE LINE 1		
Profile Grade PE 10	6.96	3.8
Profile Grade PE 11	9.3	5
Profile Grade PE 20	3.5	1.57
Profile Grade PE 45	1.3	0.66
Profile Grade PE 53	18.4	4.5
Profile Grade PE 73	7.5	4.2
Profile Grade PE 80	16	4.5
Other Grade PE 00	15.2	4.6

Other Grade PE 99	3.8	3.1
Total for Profile Line 1	18.4	5
PROFILE LINE 2		
Profile Grade PE 11	10.9	5.8
Profile Grade PE 20	4.1	1.8
Profile Grade PE 45	1.5	0.77
Profile Grade PE 53	21.5	5.2
Profile Grade PE 73	8.7	4.9
Profile Grade PE 80	18.7	5.2
Other Grade PE 00	17.8	5.4
Other Grade PE 99	4.4	3.7
Total for Profile Line 2	21.5	5.8
PROFILE LINE 3		
Profile Grade PE 10	21	34.3
Profile Grade PE 11	28	44.9
Profile Grade PE 20	10.6	14.2
Profile Grade PE 45	3.9	5.9
Profile Grade PE 53	55	40.2
Profile Grade PE 73	22.5	37.8
Profile Grade PE 80	48	40.2
Other Grade PE 00	45.7	41.4
Other Grade PE 99	11.4	28.4
Total for Profile Line 3	55	44.9
PROFILE LINE 4		
Profile Grade PE 10	54	50.8
Profile Grade PE 11	75	66.5
Profile Grade PE 20	28.5	21.0
Profile Grade PE 45	9.2	8.7
Profile Grade PE 53	165.5	59.6
Profile Grade PE 73	58.8	56.0
Profile Grade PE 80	141.6	59.6
Other Grade PE 00	134	61.32
Other Grade PE 99	27.6	42.0
Total for Profile Line 4	165.5	66.5
Combined Total Sheet Lines & Profile Lines	648.3	212.5

Table 3

CURRENT LIMITATION (TONS/YR)		PROPOSED LIMITATION (TONS/YR)	
BLOWING AGENT	1,429.8	BLOWING AGENT	3,500
VOC EMISSIONS	249	VOC EMISSIONS	249

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit Using Old Emission Factors (tons/year)	Potential To Emit Using New Emission Factors (tons/year)
PM	0.0	0.0
PM-10	0.0	0.0
SO ₂	0.0	0.0
VOC	21,610	7,083
CO	0.0	0.0
NO _x	0.0	0.0

Justification for Modification

The Part 70 Operating permit is being modified through a **Part 70 Significant Source Modification**. This modification is being performed pursuant to 326 IAC 2-7-12(d)(1), since it does not qualify as minor permit modification or as administrative amendment. “Every significant change in the existing Part 70 permit terms or conditions and every relaxation of reporting or record keeping permit terms and conditions shall be **considered significant**”. The source’s requests for a relaxation of the blowing agent input limit and the requirements for a compliance stack test to verify new emission factors are considered a significant change to the issued Part 70 permit.

County Attainment Status

The source is located in Marshall County.

Pollutant	Status (attainment, maintenance attainment, or unclassifiable; severe, moderate, or marginal nonattainment)
PM-10	unclassifiable
SO ₂	attainment
NO ₂	unclassifiable
Ozone	unclassifiable
CO	unclassifiable
Lead	unclassifiable

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Marshall County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

- (b) Marshall County has been classified as attainment or unclassifiable for all the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD Definition (based on emissions limit):

Pollutant	Emissions (tons/year)
PM	0.0
PM-10	0.0
SO ₂	0.0
VOC	249
CO	0.0
NO _x	0.0

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

Pollutant	Potential To Emit Using Old Emission Factors (tons/year)	Potential To Emit Using New Emission Factors (tons/year)
PM	0.0	0.0
PM-10	0.0	0.0
SO ₂	0.0	0.0
VOC	249	249
CO	0.0	0.0
NO _x	0.0	0.0

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Federal Rule Applicability

The federal rule determination made in the original Part 70 permit (T099-5969-00028) still applies in this modification.

State Rule Applicability - Entire Source

- (a) 326 IAC 2-2 (Prevention of Significant Deterioration) (a) The source is currently limited in the blowing agent input usage of 1,429.8 tons per year, which gives an equivalent emissions of 249 tons per year.

This modification implements the increase in production due to lower emission factors developed by the source through retention tests. Based from these factors, the source can utilize more blowing agent than what is currently permitted and still can stay below 250 tons per year major source threshold. These factors will be verified through compliance testing.

- (a) All the other states rules determined in the Part 70 permit still apply in this modification.

Compliance Requirements

There is no change in the Compliance Requirements determined in the Part 70 permit.

Conclusion

The relaxation of the existing operational limitation, shall be subject to the conditions of the attached proposed **Part 70 Significant Source Modification No.099-11161-00028**.

Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document for a Part 70 Operating Permit Significant Source Modification

Source Name:	Tenneco Packaging AVI
Source Location:	1411 Pidco Drive, Plymouth, Indiana
County:	Marshall
SIC Code:	3086
Operation Permit No.:	T099-5969-00028
Operation Permit Issuance Date:	June 28, 1999
Permit Reviewer:	Aida de Guzman

On September 16, 1999, the Office of Air Management (OAM) had a notice published in the Plymouth Pilot News, Plymouth, Indiana, stating that Tenneco Packaging AVI had applied for a Part 70 Operating Permit Significant Source Modification, for the relaxation of the blowing agent usage limitation due to improve emission factors developed from retention tests. The notice also stated that OAM proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On September 20, 1999, Tenneco Packaging AVI submitted comments on the proposed Significant Source Modification permit. The summary of the comments and corresponding responses is as follows (changes are **bolded** and deletion are struck through for emphasis): The source has submitted the following comment:

Comment 1: Tenneco Packaging AVI, requests a clarification and a confirmation that the Part 70 operating permit issued to the source supersedes and effectively modifies the terms and conditions of the Construction Permit CP099-9807, issued on October 29, 1998. The source is concerned that USEPA does not agree with IDEM's position and may attempt to enforce the blowing agent input limits in the older construction permit. The source has requested that the changes made to the Part 70 Operating Permit also be made to the construction permit.

Response 1: On July 28, 1998, the OAM was notified that the U.S. EPA would object to any Title V Operating Permit that superceded all previous construction permits. The U.S. EPA indicated that they believed that the authority for certain applicable requirements might expire if the construction permits that established them expired. The OAM believes that the regulatory process is best served if all affected parties are able to rely on the Title V Operating Permit to identify all applicable requirements and the means for demonstrating compliance with each requirement.

The OAM intends to continue discussions with the U.S. EPA regarding the issues related to past construction permits. However the OAM also believes that the Permit Shield condition B.14 (b) (1) & (2) establishes that the Title V permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of the permit

shall be deemed in compliance with any applicable requirements as of the date of the permit issuance for all the previous permits identified by the source and the OAM during the course of this review.

The following condition addresses this concern:

B.14 Permit Shield [326 IAC 2-7-15]

- (a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.
- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that:
 - (1) The applicable requirements are included and specifically identified in this permit; or
 - (2) The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.
- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAM, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAM, has issued the modification. [326 IAC 2-7-12(b)(8)]

Upon further review, the OAM has decided to add the following paragraph in condition D.1.6 (a) in order to clarify that the retention tests would also require a test protocol submission to IDEM, OAM:

D.1.6 Testing Requirements [326 IAC 2-7-6(1)]

- (a) Testing of this facility is specifically required by this permit. Compliance with the control efficiency and minimum operating temperature specified in Condition D.1.9 shall be determined by a performance test conducted in accordance with Section C Performance Testing.

Retention data tests shall also be determined by a performance test conducted in accordance with Section C Performance Testing.
- (b) During the period within 60 days after the issuance of this modification, a performance test shall be required to demonstrate that the source is complying with 326 IAC 8-1-6.
 - (1) If the oxidizer is determined to demonstrate compliance, the required temperature and control efficiency shall be specified.
 - (2) If the oxidizer is determined to not demonstrate compliance, the efficiency needed to comply with 326 IAC 8-1-6 shall be determined by the performance test.
 - (3) The source shall be required to comply with the required control efficiency as determined by the performance test.
- (c) Retention data tests, shall be ran on all grades being utilized by the source to verify the emission factors used in establishing the blowing agent and VOC emission limits. The source shall calculate the potential to emit (PTE) based on the worst case emission factors until the various emission factors for all other sheet grades have been verified and approved by OAM.